IN THE SPECIFICATION:

Paragraph beginning at line 11 of page 1 has been amended as follows:

Thermal printers, in which printing is performed by pressing thermal recording paper between a thermal head having a heating element and a platen roller, are often applied to, for example, a printer for performing receipt-printing in a cash register and a portable printer for performing printing of POS labels for foods and labels for distribution management (for example, refer to Patent Document 1 identified below).

Paragraph beginning at line 18 of page 1 has been amended as follows:

There is a known type of ~~has been~~ printing failure called sticking, which is one of the ~~as~~ defects that may happen in the above-described thermal printers. Sticking is a phenomenon in which recording paper is temporarily adhered to a thermal head during ~~in~~ printing. The phenomenon causes the following defects: ~~that:~~ (1) printing characters are crushed because of recording paper not advancing even if a platen roller is rotated; and (2) restoration work has to be performed so as to release recording paper from a thermal head and other defects.

Paragraph beginning at line 4 of page 2 has been amended as follows:

The above-described sticking phenomenon has been likely to occur particularly in, for example, the case of ~~using~~ a thermal printer of a type in which a period of time from driving ~~drive~~ of heating elements of a thermal head until the next rotation of a platen roller is long (for example, the type in which the heating elements are divided into plural blocks to be driven in block units because of the length of a printing width and for the reasons in terms of power) and the case of using recording paper whose back surface has a small frictional resistance (for example, a recording sheet with a sheet of release paper whose back-side adhesion surface is exposed by releasing the sheet of release paper). That is, it has been necessary that attention is paid on in order that the sticking phenomenon does not occur in a label printer with a relatively wide printing width.

Paragraph beginning at line 19 of page 2 has been amended as follows:

The present inventors have assumed that the above-described sticking phenomenon was pertinent to, as occurrence factors, various acting forces that are generated in a pressing portion between a thermal head and a platen roller,

and conducted various experiments. As a result, it was confirmed that a movable direction of the thermal head, an action direction of a spring force that causes a pressing force between the thermal head and the platen roller, and the like were some of the ~~concerned in the~~ occurrence factors of the sticking phenomenon, which led to the present invention.

Paragraph beginning at line 4 of page 5 has been amended as follows:

That is, explanation is made with reference to a schematic diagram of Fig. 3 as an example. A complicated force is acted on a pressing portion W between a thermal head 3 and a platen roller 2 due to a slight distortion of the platen roller 2, a force applied in a rotational direction, minute displacement of both the members which is caused when a rotational force is acted on the platen roller 2, and the like. In the case where a movable direction (rotational direction with a rotating support shaft 7 as a center) of the thermal head 3 is inclined (for example, an angle $\theta 1$ ~~e1~~) with respect to an X direction perpendicular to a head surface 3a, it is considered that an acting force F1 in an oblique direction is exerted on paper P from the thermal head 3 along with the minute displacement of the platen roller 2 and the thermal head 3 which is caused when the rotational force is

acted on the platen roller 2. Then, it is considered that a component F3 opposite to a Y direction, in which the paper is conveyed, of the acting force F1 acts on the paper P so that the paper P remains on the side of the thermal head 3 while opposing friction of the platen roller 2. Therefore, with the above-described means according to the present invention, the component F3 of the acting force can be reduced to thereby suppress the occurrence of the sticking phenomenon.

Paragraph beginning at line 1 of page 6 has been amended as follows:

Further, when a direction of a pressurizing force F5 is inclined (for example, an angle <u>θ2</u> ~~e2~~), the pressurizing force F5 has to be increased in order to generate a predetermined pressing force between the thermal head 3 and the platen roller 2. As a result, it is considered that a force, which is exerted from the pressurizing force F5 when the thermal head 3 moves slightly, is also increased, which acts on the paper P so that it remains on the side of the thermal head 3. With the above-described means according to the present invention, the force can be made minimum to thereby suppress the occurrence of the sticking phenomenon.

Paragraph beginning at bottom of page 7 has been amended as follows:

There is no particular limitation placed on the thermal printer in this embodiment. However, the thermal printer is a portable label printer in which printing is performed on, as paper, a recording sheet with a sheet of release paper (called label paper) whose back-side adhesion surface is exposed by releasing the sheet of release paper, and is of a type in which printing can be performed for a relatively wide width.

Paragraph beginning at bottom of page 9 has been amended as follows:

In the case of the printing mechanism 10 in this embodiment, an angle $\theta 1$ ~~e1~~ in Fig. 3 is 0° because the rotating support shaft 7 is arranged on the extension line of the head surface 3a of the thermal head 3. Further, since the pressurizing force F5 of the springs 4 is also perpendicular to the head surface 3a, an angle $\theta 2$ ~~e2~~ in Fig. 3 is 0°.

Paragraph beginning at line 6 of page 10 has been amended as follows:

First, an action of $\theta 1=0°$ ~~e1=0°~~ is explained. In the case where a straight line that connects the center of the

rotating support shaft 7 with the pressing portion W overlaps the head surface 3a, a movable direction of the thermal head 3 is substantially exclusively an X direction in a state in which the thermal head 3 and the platen roller 2 are pressed against each other. When a driving force of the stepping motor M exerts a rotational force on the platen roller 2, in a stage in which paper P is at a standstill, a force in a Y direction is applied on the back side of the paper P from the platen roller 2 due to a frictional force; at the same time, the opposite stress is generated on the front side of the paper P from the thermal head 3.

Paragraph beginning at line 15 of page 11 has been amended as follows:

Next, an action of <u>θ2=0°</u> ~~e2=0°~~ is explained. In the case where a predetermined pressing force needs to be generated between the thermal head 3 and the platen roller 2, the ratio of the X-directional component corresponding to the pressing force is lowered as the angle <u>θ2</u> ~~e2~~ of the pressurizing force F5 is made oblique, for example, 30° and 60°, and thus, the pressurizing force F5 itself has to be increased. Therefore, when the angle <u>θ2</u> ~~e2~~ is set at 0°, the pressurizing force F5 necessary for obtaining the predetermined pressing force is at the minimum.

Paragraph beginning at bottom of page 11 has been amended as follows:

Even in the case where the rotating support shaft 7 of the thermal head 3 is located on the extension line of the head surface, the thermal head can be slightly displaced in the Y direction due to a clearance of the bearing hole that bears the rotating support shaft, assembly back-lash, and the like. Then, the force F3 in the Y direction may be slightly exerted on the paper from the thermal head 3 along with the displacement. In this case, when the pressurizing force F5 is increased, the force F3 is increased accordingly. Therefore, when the force F3 is made at the minimum with the angle ~~e2~~ <u>θ2</u> being 0°, the forces in the Y direction, which are exerted on the front surface and back surface of the paper when the platen roller 2 is rotated, are stabilized. As a result, the occurrence factors of the sticking phenomenon are reduced.